REMARKS

Oath/Declaration

Applicant notes that a Response to Missing Parts for the present application was mailed on October 19, 2001, a copy is attached hereto as Exhibit A. This response included a fully-executed declaration, which was received by the Patent Office on December 27, 2001, as indicated by the postcard, attached as Exhibit B.

Claim Objections

. In claim 1, "module" has been amended to "controller".

Claim 16 has not been amended for the following reason: The use of the word "the" in the phrase "*the* group of devices consisting of a power module ..." is intended to indicate that the list (of devices) is to be considered as a term of art referred to as a "Markush Group". Replacing "the" with "a" would possibly cause the phrase to become undefined or indefinite, as the phrase would then possibly no longer constitute a Markush Group. A Markush Group has the general form "[members selected from] *the* group consisting of A, B, and C". Please see MPEP sec. 2173.05(h).

Claim Rejections **under 35 USC 103(a)**

Claim 1 was rejected over the combination of AAPA, Blake, and Garcia, and claim 2 was rejected over the combination of AAPA, Blake, Garcia, and Tanenbaum. Independent claims 8 and 16 were rejected for the same reasons as claim 2.

Independent claims 1 and 8 have each been amended to incorporate the (same) limitation recited in dependent claims 2 and 9, namely, "wherein said state machine performs a different sequence of operations than the code executed by said management processor".

In rejecting claim 2, the Examiner stated that "Garcia further provides the advantage that the backup processes run by the high availability controller often succeed [to] provide software fault tolerance since the high availability software environment runs different software to improve reliability of the system".

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Applicant notes that neither Garcia, nor the supplemental art made of record, but not relied upon (Giers and Doyle, et al.), teach the simultaneous use of both a non-software-based computer processor mechanism (as in Applicant's claimed non-software coded state machine) and a software-based computer processor mechanism (as in Applicant's claimed management processor) *for any application or for any purpose*.

The Examiner also stated that "One of ordinary skill in the art would have been motivated to make this modification [implementing the state machine that monitors the management processor status signal of the combination of AAPA, Blake, and Garcia as a non-software coded state machine as taught by Tanenbaum] *in order to make the state machine fast* in view of Tanenbaum" [emphasis supplied].

However, Applicant's invention functions, as claimed in amended claim 1 (which as amended, incorporates the limitation(s) of claim 2), not to *make the state machine fast*, but rather *to improve system reliability*, which is the principal thrust of the present invention. This is substantiated by paragraph 15 of Applicant's specification, which states:

> Since the high-availability controller does not perform the same
> sequence of operations as the code executed by the
> management processor, it is therefore not susceptible to failure
> resulting from a specific 'bug' that may cause the management
> processor to fail."

Tanenbaum's teaching that 'software and hardware are logically equivalent' completely misses the point that the present claimed invention makes simultaneous use of both a "non-software coded state machine" and a software-implemented "management processor" to ensure that the sequence of operations executed by both entities is, in fact, NOT equivalent. Tanenbaum's teaching is apparently cited to indicate that the use of the two types of computer processing implementation mechanisms (i.e., software and hardware) are universally functionally equivalent or interchangeable. While such equivalence may, in fact be manifest in many situations, in the case of Applicant's claimed invention (specifically, amended claim 1), Tanenbaum's tenet is actually *contrary to* Applicant's philosophy. This is because

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Applicant's invention, as claimed in claim 1, uses both a state machine and a management processor to *totally preclude the possibility that their sequence of operation is either equivalent or interchangeable*. Such 'teaching away from' an invention, as Tanenbaum appears to do in the present case, is a strong indicator of the non-obviousness of the invention.

Furthermore, since Tanenbaum is cited as a motivation for completing the combination of references, and because *such motivation is nowhere indicated as either a motivation for, or an advantage of, Applicant's claimed invention*, the combination thus rendered based on any motivation found in Tanenbaum's teaching is not established properly in accordance with a legitimate or an even reasonable motivation to combine these references. This is another reason the cited combination of references is not sufficient to find Applicant's claimed invention obvious in view thereof.

Applicant believes that the foregoing discussion applies, as well, to amended claim 8 and original claim 16. Therefore, Applicant believes that these claims, for the same reasons as set forth above with respect to claim 1, are also allowable over the cited combination of references. In addition, since all remaining dependent claims (3–7, 10–15, and 17–20) depend from claims which Applicant believes to be allowable, as amended, these claims are also believed to now be allowable.

Double Patenting

Applicant also kindly requests that the Examiner allow the Applicant to wait to file the requested terminal disclaimer until after prosecution of the present case has been settled with respect to the merits.

Conclusion

For the foregoing reasons, Applicant requests that all presently pending claims, claims 1, 3–8, and 10–20, as amended in the present Response, be allowed, pending submission of a signed declaration and terminal disclaimer, as requested by the Examiner.

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Applicants believe no other fees are due in connection with this Response; however, if any other fee is deemed necessary, the Commissioner is authorized to charge such fee to Deposit Account No. 08-2025.

Respectfully submitted,

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